State of Michigan Department of Natural Resources
Sound Assessment and Analysis
Brighton

September 30, 2008 Island Lake Recreation Area Shooting Ranges Michigan

## Appendix B:

Tabular Summary of Sound Level Data from Range Studies and Experiments

Table B-1. Summary of sound levels, in dBA, measured during the Sporting Clay Range Study.

				Locat	ion R1							Locat	ion R2				Location R3								
		June 3	3, 2008			June 1	0, 2008			June 3	3, 2008			June 1	0, 2008			June 3	3, 2008			June 1	0, 2008		
		Gun Po	sition*			Gun Position*				Gun Po	sition*			Gun Po	sition*			Gun Po	sition*		Gun Position*				
Shooter Location	LL	HL	HR	LR	LL	HL	HR	LR	LL	HL	HR	LR	LL	HL	HR	LR	LL	HL	HR	LR	LL	HL	HR	LR	
A1	53	51	49	51	53	53	47	49					52	51	56	54									
A1	53	51	47	47					45	44	47	46													
A1	60	58	49	52					45	46	47	46													
A2	49	50	53		52	50	52	54						48	58	61									
А3	48	48	54	55	52	55	55	53			44	45	46	49	52	53									
В	51	50	47	48			50				45		54	56	64	64									
C (inside)	48	46	55	57			51	53					50	51	56	49									
C (outside)	50	47	54	54																					
D	49	49	53	50			55	50																	
E			46	47																					
F(inside)																									
F (outside)			48	47																					
G																									
Н																									
L																									
J																	50	50		46					
K																	61	58							
L(inside)																	58	58		47	46	49		47	
L (outside)																	58	56	47	45					
М																	53	56	51	50	47	47			
N																		61							
0																	57	51	48	48					
P (inside)																	55	53	52	51	50	53	53	53	
P (outside)																	53	53	53	52					
Q																		55	55		50	52	47	45	

				Locat	ion R1							Locat	ion R2				Location R3								
		June 3	3, 2008			June 1	0, 2008			June 3	3, 2008			June 1	0, 2008			June 3	3, 2008		June 10, 2008				
01 1		Gun Po	sition*		Gun Position*					Gun Po	sition*			Gun Po	sition*			Gun Po	sition*		Gun Position*				
Shooter Location	LL	HL	HR	LR	LL	HL	HR	LR	LL	HL	HR	LR	LL	HL	HR	LR	LL	HL	HR	LR	LL	HL	HR	LR	
R																	52	54	48	50	50	54	50	55	
S (inside)																	50	49	49	51	50	57	52	58	
S (outside)																	52	54	55	54					
Т																			47	48		51	52	53	
U																						49			
V (inside)																									
V (outside)																									
W																									
Х																									
Υ																									
Z																									

<sup>\*</sup> Gun position key: LL= level left, HL= high left, HR= high right, LR= level right.
"----" indicates that the gunshot was not audible and/or identifiable in the data

Empty cells denote conditions that were not tested on June 10, 2008

On June 3, 2008, measurements took place from approximately 10:41 am to 11:46 am

On June 10, 2008, measurements took place from approximately 11:19 am to 11:51 am

Table B-2. Summary of sound levels, in dBA, measured during the Trap and Skeet Range Study.

		Skeet														Test 1)									
	Position S1 Position S3 Position S4 Po						Positi	on S6	Positi	Position S7		Position S8		Position T1		Position T3		ion T5	Position T1		Position T3		Position T5		
Location	1 <sup>st</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	Ambient
R1				47	49	54	47	46	45	45	44	-	45	48	49	44	44	51	47	48	45	47	47	49	39-45
R2														45	46	45			45	49	43	44	47	47	38-48
R3																									33-43

Table B-3. Summary of sound levels, in dBA, measured during the Rifle and Pistol Range Study.

			100	Yard Ra	nge (Te	est 1)			100	Yard Ra	inge (Tes	st 2)				50 Yard	d Range									
		Lar	ne 4	Lan	e 11	Lan	e 17	Lar	ne 4	4 Lane		Lan	e 17	Lan	e 21	Lane 26		Lane 30		Lane 31		Lane 35		Lane 40		
Location	Gun Type*	1 <sup>st</sup>	2 <sup>nd</sup>	Ambient dBA																						
R1	.308-SA	52	51	53	50	50	50	55	57	53	54	52	50	62	57	56	53	49	47	48	49	51	49	48	47	42 to 49
	.308-BA			49	51					50	49					56	51									
	.223-SA				50					53	52					51	50									
	12 Ga			48	48	50	49	49	46	48	50	49	47	51	50	52	51	53	52	54	52	50	51	55	50	
	40 Cal	50	49					48	47	48	48			48	46	48	50	48	46		46					
R2	.308-SA																									38-45
	.308-BA																									
	.223-SA																									
	12 Ga																									
	40 Cal																									
R3	.308-SA																									35-48
	.308-BA																									
	.223-SA																									
	12 Ga																									
	40 Cal																									

<sup>\*</sup> Gun Type key: .308-SA = semi-automatic rifle, .308-BA = .308 bolt action rifle, .223-SA = semi-automatic rifle, 12 Ga= 12 gauge shotgun, 40 Cal= 40 caliber handgun.

<sup>&</sup>quot;----" indicates that the gunshot was not audible and/or identifiable in the data